

**CLAIMS**

We claim:

- 5        1.        An anti-idiotypic antibody directed against Anti-Lewis Y monoclonal antibody.
2.        The anti-idiotypic antibody of claim 1, which binds to the variable region of an anti-Lewis Y monoclonal antibody.
- 10       3.        The anti-idiotypic antibody of claim 1, which blocks the binding of an anti-Lewis Y monoclonal antibody.
4.        The anti-idiotypic antibody of claim 1 which specifically binds hu3S193.
- 15       5.        The anti-idiotypic antibody of claim 1 which is selected from the group consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
6.        The anti-idiotypic antibody of claim 2 which is selected from the group  
20       consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
7.        The anti-idiotypic antibody of claim 3 which is selected from the group  
25       consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
8.        The anti-idiotypic antibody of claim 4 which is selected from the group  
30       consisting of a monoclonal antibody, a chimeric antibody, a human antibody, a humanized antibody, or a single chain antibody.
9.        A hybridoma capable of producing the anti-idiotypic antibody of claim 1.

10. A hybridoma capable of producing the anti-idiotypic antibody of claim 2.
11. A hybridoma capable of producing the anti-idiotypic antibody of claim 3.
- 5 12. A hybridoma capable of producing the anti-idiotypic antibody of claim 4.
13. The hybridoma of claim 12, which is, selected from the group consisting of LMH-1, LMH-2, and LMH-3.
- 10 14. The anti-idiotypic antibody of claim 4, which is produced by a hybridoma, selected from the group consisting of LMH-1, LMH-2, and LMH-3.
- 15 15. A method of detecting binding specificity of anti-idiotypic antibodies comprising:
- a. coating an Elisa plate with anti-Lewis Y antibody, purified human IgG or other control Mab;
- b. adding purified anti-idiotypic antibody;
- c. incubating with secondary antibody; and
- 20 d. detecting the amount of bound anti-idiotypic antibody, wherein binding of an anti-idiotypic antibody to the antibody evidences binding specificity.
16. The method of claim 15 wherein the mAB is hu3S193.
- 25 17. The method of claim 15 wherein the anti-idiotypic antibody is directed against anti-Lewis Y antigen.
18. A method of detecting anti-idiotypic anti-Lewis Y antibodies capable of blocking the binding of anti-Lewis Y monoclonal antibody comprising:
- 30 a. coating an Elisa plate with Lewis Y-BSA coupled antigen;
- b. adding anti-idiotypic antibody;

- 5                   c. adding monoclonal anti-Lewis Y idiotypic antibody; and  
                  d. detecting bound anti-Lewis Y monoclonal antibody, wherein the amount  
                  of anti-Lewis Y antibody bound to the antigen in the presence and  
                  absence of anti-idiotypic antibody is evidence of the ability of the anti-  
                  idiotypic antibody to block the binding of anti-Lewis monoclonal antibody.
19.   The method of claim 18 wherein the anti- anti-Lewis Y monoclonal antibody is  
      hu3S193.
- 10   20.   The method of claim 18 wherein the anti-idiotypic antibody is directed against  
      anti-Lewis Y antibody
21.   A method of detecting anti-Lewis Y antibody in a serum sample comprising:  
      a. coating ELISA plate with synthetic Lewis Y-BSA antigen;  
15       b. adding serum samples to the ELISA plates;  
      c. adding peroxidase conjugated anti-Lewis Y anti-idiotypic antibody to the  
      ELISA plates; and  
      d. determining the presence of anti-Lewis Y antibody from the amount of  
      peroxidase conjugated anti-Lewis Y anti-idiotypic antibody bound to  
20       antigen-coated ELISA plate.
22.   The method of claim 21 wherein the monoclonal idiotypic antibody is hu3S193
23.   A method of detecting an anti-Lewis Y HAHA response in a subject who has  
25       been administered a humanized anti-Lewis Y monoclonal antibody  
      comprising:  
          a. collecting serum sample from the subject;  
          b. reacting the serum sample to a Lewis Y antigen coated ELISA plate in the  
          presence or absence of a peroxidase conjugated anti-Lewis Y antibody;  
30       and

- c. determining there from the presence or absence of anti-idiotypic anti-Lewis antibody, wherein presence of anti-idiotypic anti-Lewis antibody evidences a HAMA response.